



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,119	12/18/2001	Thomas J. Sonderman	2000.83400	2419
23720	7590	03/11/2004	EXAMINER	
WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			GOUDREAU, GEORGE A	
			ART UNIT	PAPER NUMBER
			1763	

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,119

Applicant(s)

SONDERMAN ET AL.

Examiner

George A. Goudreau

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12-18-01' to 12-23-03'.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

George A. Goudreau
GEORGE GOUDREAU
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1763

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6-8, 17-20, 22-24, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Davis et. al. (6,469,518).

Davis et. al. disclose a device (i.e.-a CVD reactor, etc.) which is used for processing substrates (i.e.-wafers, etc.) in which a measurement tool (i.e.-SEM, etc.) is used to measure the defects in wafers processed through the device. The measurement frequency (i.e.-the sampling rate) of the tool is automatically changed based upon a usage characteristic (i.e.-elapsed time since preventative maintenance is performed in tool). The operation of the device is altered in order to reduce the detected level of defects in the wafers processed through the device. If the detected defect rate of the wafers processed through the device exceeds a targeted threshold, the sampling rate of the measurement tool is increased. Likewise if the defect rate of the wafers processed through the device is below a targeted threshold, the sampling rate of the measurement tool is decreased. This is discussed in columns 1-6. This is shown in figures 1-4.

Art Unit: 1763

3. Claims 1-4, 6-12, 14-20, 22-28, and 30-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Shanmugasundram et. al. (2002/0193899).

Shanmugasundram et. al. disclose a device (i.e.-an etcher, a cmp polishing tool, a CVD apparatus, etc.) in which a measurement tool is used to measure the defects in wafers processed through the device. The measurement frequency (i.e.-the sampling rate) of the tool is automatically changed based upon a usage characteristic. A change in the usage characteristic of the device occurs when there is a change in the process recipe used to fabricate the device or there is a change in the detected defect rate of the fabricated device. A change in the process recipe can occur when changes in any of the process gas pressure, processing time, or process gas flow rates occurs. The operation of the device is altered in order to reduce the detected level of defects of wafers processed through the device while simultaneously reducing any unnecessary testing of wafers which adversely increases the processing costs for fabricating the device. This is discussed on pages 1-10. This is shown in figures 1-6.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1763

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 5, 13, 21, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanmugasundram et. al. as applied in paragraph 3 above further in view of Tobin, Jr. et. al. (5,982,920).

Shanmugasundram et. al. as applied in paragraph 3 above fail to specifically disclose the usage of bins to store wafers to be processed through the process taught above.

Tobin, Jr. et. al. teach that it is desirable to use bins to store wafers to be processed through a semiconductor process. This is taught in columns 1-10. This is shown in figures 1-9.

It would have been obvious to one skilled in the art to employ bins to store the wafers to be processed in the process taught by Shanmugasundram et. al. based upon the teachings of Tobin, Jr. et. al. that it is desirable to do so.

Art Unit: 1763

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-37 of U.S. Patent No. 6,650,955. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following.

-US patent No. 6,650,955 claims essentially all of the same features as those which are claimed in the present application.

9. Claims 2, 10, 18, and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.


-The usage of the term "predetermined" in the claims is vague, and indefinite.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 1763

11. Any inquiry concerning this communication should be directed to examiner

George A. Goudreau at telephone number 703-308-1915.


George A. Goudreau
Primary Examiner
Art Unit 1763